



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,729	02/15/2002	Kevin Allen Sapp	1322/98	3521
25297	7590	01/09/2006	EXAMINER	
JENKINS, WILSON & TAYLOR, P. A.			HALIYUR, VENKATESH N	
3100 TOWER BLVD			ART UNIT	
SUITE 1400			PAPER NUMBER	
DURHAM, NC 27707			2664	

DATE MAILED: 01/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/077,729	SAPP, KEVIN ALLEN	
	Examiner	Art Unit	
	Venkatesh Haliyur	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/15/2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-12 and 14-28 is/are rejected.
- 7) ☒ Claim(s) 2 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>one</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1 – 28 have been examined.

Claim Rejections - 35 USC § 112

2. Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are:

- a. Independent claim 12 shows only steps (a) through (d) and does not show step (e) as included in claim 18.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1,3-12,14-28, are rejected under 35 U.S.C. 102(e) as being anticipated by Ko et al. [US Pub: US2003/0100299].

Regarding claims 1,12 Ko et al. disclosed "Network Testing Systems" a system and method for testing digital mobile phone network (GPRS), packet-based communications node, the system comprising, a packet generator [item 706 of Fig 7] for

generating user data to be sent over a connection to a packet-based communications node under test [item 702 of Fig 7] and further disclosed a communication protocol stack [item 808 of Fig 8] having layers for communicating with packet-based communications nodes over a network and adding header information to user data generated by the packet generator to form packets and a packet replicator [item 708 of Fig 7] associated with the communication protocol stack and the packet generator for receiving packets generated by the communication protocol stack and replicating predetermined packets to the packet-based communications node under test, wherein replicating the packets includes bypassing at least one layer of the communication protocol stack [Figs 4a,5,6,7, Para 0036, 0037, 0046-0051, 0098-0101, 0114-0118].

Regarding claims 3-5, 14-17, Ko et al. disclosed the communication protocol stack includes an Ethernet layer and the packet replicator resides in an Ethernet layer (appropriate protocol) device driver [item 712 of Fig 7] and the packet replicator is adapted to replicate packets to the packet-based communications node under test at user-specified intervals and the packet replicator is adapted to repeat replication of the packets according to a user configurable repeat count [item 718 of Fig 7] during each time interval [Fig 7, Para 0037,0056,0061,0098, 0114-0118, 0131,0135].

Regarding claims 6,19, Ko et al. disclosed the packet replicator is adapted to search for a predetermined key value in packets received from layers above the packet replicator in the communication protocol stack and to replicate only those packets that match the key value to the packet-based communications node under test [Para 0101-0104].

Regarding claims 7-10,18, Ko et al. disclosed controller state machine [item 714 of Fig 7] for controlling operations of the packet generator [item 706 of Fig 7], the communication protocol stack, and the packet replicator and the controller state machine includes a graphical user interface whereby a user defines states for controlling operations of the packet generator, the communication protocol stack [item 808 of Fig 8], and the packet replicator, and a test platform including a plurality of link interface controllers, each link interface controller including a processor and a packet memory, wherein an instance of the packet generator, the communications protocol stack, and the packet replicator is executed by each processor and the packet replicator is adapted to store packets received from the packet generator in the packet memory [Figs 7 & 8, Para 0065,0114-0122].

Regarding claims 11, Ko et al. disclosed a plurality of link interface modules, one link interface module coupled to each link interface controller, wherein the link interface modules implement at least a portion of the communication protocol stack [Fig 8, Para 0036,0037,0081,0082,0061,0120,0121].

Regarding claims 20-22,26-28, Ko et al. disclosed replicating the packets to the packet-based communications node under test includes replicating packet to a signaling GPRS support node (SGSN), replicating the packet to the packet-based communications node under test includes replicating the packet to a gateway GPRS support node (GGSN), replicating the packet to the packet-based communications node under test includes replicating the packet to a radio network controller (RNC) [Figs. 2,3a, 3b, 8, Para 0036 ,0037 ,0120, 0121].

Regarding claim 23-25, Ko et al. disclosed a computer program product comprising computer-executable instructions embodied in a computer-readable medium for performing steps comprising, generating user data packets for testing a packet-based communications node, passing the user data packets downward through a communication protocol stack, at a predetermined layer in the communications protocol stack, searching the packets for a predetermined key value, and in response to detecting a packet having the key value, storing the packet and replicating the packet to the packet-based communications node under test and searching the packets for a predetermined key value includes searching the packets for a GPRS tunnel protocol identifier [Figs 6-9, Para 0034-0037, 0046-0061, 0098-0135].

Allowable Subject Matter

Claims 2, 13, objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art in reference here is Ko et al.

4. Any inquiry concerning this communication or earlier communications should be directed to the attention to Venkatesh Haliyur whose phone number is 571-272-8616.

Art Unit: 2664

The examiner can normally be reached on Monday-Friday from 9:00AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached @ (571)-272-3134. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (571)-272-2600 or fax to 571-273-8300.

5. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).


Ajit Patel
Primary Examiner